

What is claimed is:

1. An aging circuit for an organic electro luminescence device, comprising:
a plurality of pixels arranged in a matrix at intersection areas of row lines and column lines; and
an aging circuit having at least one aging AC voltage source in order to apply a specific aging AC voltage pulse to the pixels.
2. The aging circuit according to claim 1, wherein each of the pixels includes:
an organic electro luminescence cell formed at a pixel area between the column lines and the row lines;
a first switch device formed at the intersection area of the column line and the row line for acting as a switch;
a second switch device formed between a cell drive voltage source and the electro luminescence cell for driving the electro luminescence cell; and
a capacitor connected between the first and second switch devices, wherein a cathode terminal of the electro luminescence cell is connected to a cell support voltage source of a positive voltage.
3. The aging circuit according to claim 2, further comprising:
first and second aging AC voltage sources that are switched between 0V and a specific

negative voltage, the specific negative voltage is different for each aging AC voltage source;

a first aging switch device connected between the first aging AC voltage source and a gate terminal of the first switch device;

a second aging switch device connected between the second aging AC voltage source and a source terminal of the first switch device; and

a third aging AC voltage source for turning on the first and second aging switch devices.

4. The aging circuit according to claim 3, wherein a supply voltage difference between the cell drive voltage source and the cell support voltage source is -15V .

5. The aging circuit according to claim 4, wherein a supply voltage of the cell drive voltage source is -5V , and a supply voltage of the cell support voltage source is $+10\text{V}$.

6. The aging circuit according to claim 5, wherein the first to third aging AC voltage sources are applied with an AC voltage pulse, and there is a relationship of the cell drive voltage source $>$ the second aging AC voltage source $>$ the first aging AC voltage source $>$ the third aging AC voltage source with respect to the supply voltage.

7. The aging circuit according to claim 6, wherein a supply voltage of the second aging AC voltage source is -10 V , a supply voltage of the first aging AC voltage source is -15V and a supply voltage of the third aging AC voltage source is -20V .

8. The aging circuit according to claim 1, wherein each of the pixels includes:

- an organic electro luminescence cell formed at a pixel area between the column lines and the row lines;
- a first switch device formed between a cell drive voltage source and the electro luminescence cell for driving the electro luminescence cell;
- a second switch device connected to the cell drive voltage source to form a current mirror with the first switch device;
- a third switch device connected to the second switch device, the column line and the row line for responding to a signal in the row line;
- a fourth switch device connected between the third switch device and gate terminals of the first and second switch devices; and
- a capacitor connected between the cell drive voltage source and the gate terminals of the first and second switch devices, wherein a cathode terminal of the electro luminescence cell is connected to a cell support voltage source of a positive voltage.

9. The aging circuit according to claim 8, further comprising:

- first and second aging AC voltage source that are switched between 0V and a specific negative voltage, the specific negative voltage is different for each aging AC voltage source;
- a first aging switch device connected between the first aging AC voltage source and a gate terminal of the third switch device;

a second aging switch device connected between the first aging AC voltage source and a gate terminal of the fourth switch device;

a third aging switch device connected between the second aging AC voltage source and a source terminal of the third switch device; and

a third aging AC voltage source for turning on the first to third aging switch devices.

10. The aging circuit according to claim 9, wherein a supply voltage difference between the cell drive voltage source and the cell support voltage source is -15V .

11. The aging circuit according to claim 11, wherein a supply voltage of the cell drive voltage source is -5V , and a supply voltage of the cell support voltage source is $+10\text{V}$.

12. The aging circuit according to claim 11, wherein the first to third aging AC voltage source are applied in an AC voltage pulse, and there is a relationship of the cell drive voltage source $>$ the second aging AC voltage source $>$ the first aging AC voltage source $>$ the third aging AC voltage source with respect to the supply voltage.

13. The aging circuit according to claim 12, wherein a supply voltage of the second aging AC voltage source is -10 , a supply voltage of the first aging AC voltage source is -15V and a supply voltage of the third aging AC voltage source is -20V .

14. A driving method of an aging circuit for an organic electro luminescence device, wherein the aging circuit applies a specific aging voltage to pixels of the organic electro luminescence device, comprising:

applying a plurality of aging AC voltages to the pixels, the aging AC voltage is applied in an AC voltage pulse; and

causing an electro luminescence cell within the pixel to emit light by the aging AC voltage in accordance with a current corresponding to a current path formed.

15. The driving method according to claim 14, wherein the electro luminescence cell emits light in accordance with a voltage difference between a cell support voltage source and a cell drive voltage source corresponding to the current path.

16. The driving method according to claim 15, wherein the cell drive voltage source applies a negative voltage and a supply voltage difference between the cell drive voltage source and the cell support voltage source is 15V.

17. The driving method according to claim 15, wherein the aging AC voltage sources apply a voltage lower than the cell drive voltage source applies.